

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Applicants:	De Courville et al.	Group Art Unit:	Unknown
Application No.:	Unknown	Examiner:	Unknown
Date Filed:		Batch No.:	Unknown
Intl. Appl. No.:	PCT/EP03/00596	Intl. Filing Date:	January 22, 2003
Title:	RECEPTION OF MULTICARRIER SPREAD SPECTRUM SIGNALS		

INFORMATION DISCLOSURE STATEMENT (IDS)

Assistant Commissioner For Patents
Washington, D.C. 20231

SIR:

In accordance with 37 C.F.R. §1.56 and in compliance with 37 C.F.R. §§1.97 and 1.98, the references listed on attached Form PTO/SB/08 and/or subsequently identified herein, are being submitted herewith for consideration by the United States Patent and Trademark Office.

I. COPIES

- a. ☒ A legible copy of (i) each U.S. and foreign patents; (ii) each publication or that portion which caused it to be listed; and (iii) all other information or that portion which caused it to be listed, is included herewith.
- b. ☐ Any patents, publications or other information which are listed on PTO/SB/08 which are not enclosed herewith were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. §120:

U.S. Serial Number

U.S. Filing Date

II. CONCISE EXPLANATION OF THE RELEVANCE (check at least one box)

- a. ☒ Except as may be indicated below in (b) of this section, all of the patents, publications or other information are in the English language (concise explanation not required).
- b. ☐ A concise explanation of the relevance of all patents, publications or other information listed that is not in the English language is as follows:
- c. ☐ The following additional information is provided for the Examiner's consideration:

III. ☐ CROSS REFERENCE TO RELATED APPLICATION(S)

The Examiner is advised that the following co-pending application(s) contain(s) subject matter that may be related to the present application. By bringing this (these) applications to the Examiner's attention, Applicant(s) does(do) not waive the confidentiality provisions of 35 U.S.C. §122.

Serial No.

Filing Date

Art Unit

FEES

IV. ☒ THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(b): (check one box)

- a. ☒ within three months of the filing date of a national application other than a continued prosecution application under § 1.53(d) (37 C.F.R. §1.97(b)(1)). No fee or statement is required.
- b. ☐ within three months of the date of entry of the national stage as set forth in § 1.491 in an international application (37 C.F.R. §1.97(b)(2)). No fee or statement is required.
- c. ☐ before the mailing date of a first Office Action on the merits (37 C.F.R. §1.97(b)(3)). No fee or statement is required.
- d. ☐ before the mailing date of a first Office Action after the filing of a request for continued examination under § 1.114 (37 C.F.R. § 1.97(b)(4)). No fee or statement is required.

V. ☐ THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(c): (check one box)

before the mailing date of any of a Final Office Action under 37 C.F.R. §1.113, a Notice of Allowance under 37 C.F.R. §1.311, or an action that otherwise closes prosecution in the application (See 37 C.F.R. §1.97(c)).

- a. ☐ No statement, therefore, charge deposit account 502117 the fee set forth in 37 C.F.R. §1.17(p).
 b. ☐ See the statement below. No fee is required.

VI. ☐ THIS IDS IS BEING FILED UNDER 37 C.F.R. §1.97(d):

on or before payment of the issue fee and is accompanied by the following:

- 1) a statement under 37 C.F.R. §1.97(e) as provided below; and
 2) charge deposit account 502117 the petition fee set forth in §1.17(p).

VII. ☒ STATEMENT UNDER 37 C.F.R. §1.97(e) (check only one box, if applicable)

The undersigned hereby states that

- a. ☒ each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of IDS; or
 b. ☐ no item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application, and to knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement, or
 c. ☐ some of the items of information contained in the IDS were cited in a communication from a foreign Patent Office. As to this information, the undersigned states that each item of information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby states that no item of this remaining information contained in the IDS was cited in a communication from a foreign Patent Office in a counterpart foreign application or, to the knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 C.F.R. 1.56(c) more than three months prior to the filing of this statement.


VIII. PAYMENT OF FEES

- ☐ A check in the amount of _____ is enclosed for the above-identified fee(s).
☐ Please charge Deposit Account No. 502117 in the amount of \$180.00 for the above-indicated fee(s).
☒ If Applicant has overlooked any additional fees, or if any overpayment has been made, the Commissioner is hereby authorized to credit or debit Deposit Account 502117
☐ Two Copies of this paper are attached for Deposit Account charges and debits.

The above references are being cited only in the interests of candor and without any admission that they constitute statutory prior art or contain matter which anticipates the invention or which would render the same obvious, either singly or in a combination, to a person of ordinary skill in the art.

If the Examiner has any questions concerning this IDS, he/she is requested to contact the undersigned. If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 502117.

Respectfully submitted,
 De Courville et al.


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Enclosures: ☒ Information Disclosure
 ☒ Statement by Applicant
 ☒ References
 ☒ Foreign Search Report
 ☐ Other:

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DT12 Rec'd PCT/PTO 19 JUL 2004

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Complete if Known

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number			
		Filing Date			
		First Named Inventor		DE COURVILLE ET AL.	
		Group Art Unit			
		Examiner Name			
Sheet		of		Attorney Docket Number	CR00548P C01

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		BAUDAIS J-Y ET AL: "An Improved Linear MMSE Detection Technique for Multi-Carrier CDMA Systems: Comparison and Combination with Interference Cancellation Schemes", European Transactions on Telecommunications, Eurel Publication, Milano, IT, vol. 11, NR. 6, Nov. 2000, pages 547-554. XP001006826 ISSN: 1124-318X.	
		KALOFONOS, D N ET AL: Performance of the multi-stage detector for a MC-CDMA system in a Rayleigh fading channel", GLOBAL TELECOMMUNICATIONS CONFERENCE, 1996. GLOBECOM '96. 'COMMUNICATIONS: THE KEY TO GLOBAL PROSPERITY LONDON, UK 18-22 NOV. 1996, NEW YORK, NY, USA, IEEE, US, pages 1784-1788. XP010220186	
		BURY A ET AL: "Block transmission equalizers using constrained minimum variance filters with application to MC-CDMA", vol. 1, 06-08 Sept. 2000, pages 159-163 XP010517542.	
		HÉLARD J--F ET AL.: "Linear MMSE detection technique for MC-CDMA", ELECTRONICS LETTERS, IEE STEVENAGE, GB, VOL. 36, NR. 7, 20 MARCH 2000, pages 665-666. XP006015082.	
		GINIS G ET AL: "ON THE RELEATION BETWEEN V-BLAST AND THE GDPE", IEEE COMMUNICATIONS LETTERS, IEEE SERVICE CENTER, PISCATAWAY, US, US, VOL. 5, NR. 9 SEPT. 2001 pages 364-366. XP001107969.	

Examiner Signature		Date Considered	
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation, if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English Language Translation is attached.